

## **Abstract of the Disclosure**

A method locates a mobile node in a partially synchronized wireless network comprised of nodes with heterogeneous communication ranges. The time intervals it takes for messages to travel from stationary nodes at known location to a mobile node at an unknown location are measured and used to determine a set of possible coordinates of the mobile node. This time-based set of coordinates is in the form of a hyperbolic function. The received signal strengths of a message received from the mobile node is measured in two additional stationary nodes at known location. These RSS-based measurements provide two more sets of possible coordinates of the mobile node. The three sets are then intersected to estimate the location of the mobile node.